

REMARKS

Upon entry of this amendment, claims 1 and 5-8 are pending in this application. Claim 1 has been amended; claims 2-4 have been cancelled. Claims 5-8 have been added. No new matter has been added.

Applicants note that a number of editorial amendments have been made to the specification and abstract for grammatical and general readability purposes. The amendments to the specification and abstract are incorporated in the attached substitute specification and abstract. No new matter has been added. Also enclosed is a marked-up copy of the original specification and abstract showing the changes incorporated into the substitute specification and abstract. The enclosure is captioned **"Version with markings to show changes made."**

On pages 2-5 of the Office Action, original claims 1-4 were rejected under 35 U.S.C. § 102(b) as being anticipated by Patel et al. ("Patel," U.S. 6,942,811). This rejection is considered moot with respect to cancelled claims 2-4. Further, Applicants respectfully submit that this rejection is clearly inapplicable to amended claim 1 and new claims 5-8 for at least the following reasons..

Amended independent claim 1 recites a substrate processing system including a pressure pump disposed between a reactor and a reservoir tank. The pressure pump is operative to generate a pressure difference between the reactor and the reservoir tank to cause a process gas to flow from the reactor to the reservoir tank. Claim 1 further requires a pressure pump upstream valve, a pressure pump downstream valve, a turbo-molecular pump connected to the reactor, a turbo-molecular pump upstream valve, and a dry pump disposed downstream of the turbo-molecular pump. Thus, claim 1 has been amended to include the pressure pump previously recited in original claim 2, clarify the location of the pressure pump, and to recite additional features of the present invention. It is

submitted that the amended limitations patentably distinguish the present invention over Patel and the other references of record.

In the Office Action, the Examiner asserts that vacuum pump 23 of Patel corresponds to the pressure pump of the present invention. However, as is clear from Figure 2, pump 23 of Patel is not disposed between the reactor (15) and the reservoir tank (12), as specifically required by claim 1. Furthermore, pump 23 evacuates the reservoir and reactor (Fig. 2, Col. 3, lines 25-26), instead of facilitating the flow of process gas from the reactor into the reservoir. In other words, in contrast to the pressure pump of claim 1, pump 23 of Patel does not generate a pressure difference between the reactor (15) and reservoir (12) to cause the process gas to flow from the reactor to the reservoir tank.

Further in this regard, Applicants acknowledge that Patel discloses a reciprocating pump (18) connected to the reservoir and the reactor. However, reciprocating pump 18 facilitates the flow of process gas into the reactor (15) (Col. 4, lines 62-67), whereas the pressure pump of the present invention causes the process gas to flow from the reactor to the reservoir tank. Thus, it is respectfully submitted that reciprocating pump 18 of Patel also does not correspond to the pressure pump of the present invention.

In addition, Applicants note that Patel does not disclose or suggest a pressure pump upstream valve, a pressure pump downstream valve, a turbo-molecular pump connected to the reactor, a turbo-molecular pump upstream valve, or a dry pump disposed downstream of the turbo-molecular pump, as required by claim 1.

In view of the forgoing, it is believed apparent that claim 1 is not anticipated by Patel. Furthermore, it is submitted that there is no teaching or suggestion in Patel or the other references of record that would have motivated a person of ordinary skill in the art to have modified Patel in such a manner as to result in, or otherwise render obvious the present invention of claim 1. Accordingly,

it is respectfully submitted that claim 1 is patentable over the references of record.

New independent claim 5 recites a substrate processing method utilizing a substrate processing system that includes the above-identified distinguishable features of claim 1. Thus, for at least the reasons advanced above with respect to claim 1, Applicants respectfully submit that claim 5 is patentable over the references of record. Claims 6 and 7 depend from claim 5 and are considered patentable by virtue of their dependency.

Finally, the Examiner's attention is directed to new dependent claim 8 which further distinguishes the present invention over the prior art. Specifically, claim 8 recites that the pressure pump is disposed between the reactor and the first circulation pipe such that the process gas flows from the reactor to the reservoir tank through the first circulation pipe. In any event, claim 8 depends from claim 1 and is considered patentable by virtue of its dependency.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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